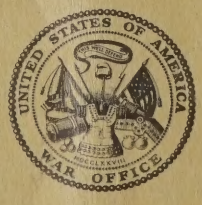
TM 11-5830-220-10

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

AUDIO FREQUENCY AMPLIFIER AM-1003/G



HEADQUARTERS, DEPARTMENT OF THE ARMY

SEPTEMBER 1959

TM 11–5830–220–10
*C 2

TECHNICAL MANUAL
OPERATOR'S MANUAL
AMPLIFIER, AUDIO FREQUENCY AM–1003/G

TM 11–5830–220–10
CHANGE NO. 2

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *20 September 1963*

TM 11–5830–220–10, 2 September 1959, is changed as follows:

Page 2. Paragraph 1.

Add paragraph 1.1 after paragraph 1.

1.1. Index of Publications

Refer to the latest issue of DA Pam 310–4 to determine whether there are new editions, changes or additional publications pertaining to your equipment. DA Pam 310–4 is an index of current technical manuals, technical bulletins, supply bulletins, lubrication orders, and modification work orders that are available through publications supply channels. The index lists the individual parts (–10, –20, –35P, etc.) and the latest changes to and revisions of each equipment publication.

Paragraph 2. Delete paragraph 2 and substitute:

2. Forms and Records

a. Reports of Maintenance and Unsatisfactory Equipment. Use equipment forms and records in accordance with instructions in TM 38–750.

b. Report of Damaged or Improper Shipment. Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700–58 (Army), NAVSANDA Publication 378 (Navy), and AFR 71–4 (Air Force).

c. Reporting of Equipment Manual Improvements. The direct reporting by the individual user of errors, omissions, and recommendations for improving this manual is authorized and encouraged. DA Form 2028 (Recommended Changes to DA Technical Manual Parts Lists or Supply Manual 7, 8 or 9) will be used for reporting these improvements. This form will be completed in triplicate using pencil, pen, or typewriter. The original and one copy will be forwarded direct to: Commanding Officer, U.S. Army Electronics Materiel Support Agency, ATTN: SELMS-MP, Fort Monmouth, N.J. One information copy will be furnished to the individual's immediate supervisor (e.g., officer, supervisor, etc).

Paragraph 5 (as changed by C 1, 4 Jan 60). Delete paragraph 5 and substitute:

5. Components
(fig. 1)

The equipment consists of one component, Audio Frequency Amplifier AM–1003/G. No cables or spare parts are furnished with the equipment. The amplifier is 16 inches long by 5 inches wide by 5½ inches high, and weighs 5 pounds.

Page 7, chapter 3. Make the following changes: Delete paragraphs 11 and 12 and substitute:

11. Scope of Maintenance

The maintenance duties assigned to the operator of AM–1003/G are listed below together with a reference to the paragraphs covering the

* This change supersedes C 1, 4 January 1960.

specific maintenance function. The duties assigned do not require tools or test equipment other than those issued with the equipment.

a. Daily preventive maintenance checks and services (par. 12.2).

b. Weekly preventive maintenance checks and services (par. 12.3).

c. Cleaning (par. 12.4).

12. Preventive Maintenance

Preventive maintenance is the systematic care, servicing, and inspection of equipment to prevent the occurrence of trouble, to reduce downtime, and to assure that the equipment is serviceable.

a. Systematic Care. The procedures given in paragraphs 12.2 through 12.4 cover routine systematic care and cleaning essential to proper upkeep and operation of the equipment.

b. Preventive Maintenance Checks and Services. The preventive maintenance checks and services charts (pars. 12.1 and 12.3) outline functions to be performed at specific intervals. These checks and services are to maintain Army electronic equipment in a combat serviceable condition; that is, in good general (physical) condition and in good operating condition. To assist operators in maintaining combat serviceability, the charts indicate what to check, how to check, and what the normal conditions are; the *references* column lists the illustrations, paragraphs, or manuals that contain detailed repair or replacement procedures. If the defect cannot be remedied by the operator, higher echelon maintenance or repair is required. Records and reports of these checks and services must be made in accordance with the requirements set for in TM 38–750.

Add paragraphs 12.1 through 12.4 after paragraph 12.

12.1. Preventive Maintenance Checks and Services Periods

Preventive maintenance checks and services of Audio Frequency Amplifier AM–1003/G are required daily and weekly. Paragraphs 12.2 and 12.3 specify the items to be checked and serviced. In addition to the routine daily and weekly checks and services, the equipment should be rechecked and serviced immediately before going on a mission and as soon after completion of the mission as possible.

12.2. Daily Preventive Maintenance Checks and Services Chart

Sequence No.	Item	Procedure	References
1	Completeness	See that the equipment is complete (app. II)	
2	Installation	See that the equipment is properly installed (par. 9).	
3	Cleanliness	See that the equipment is clean	Par. 12.4.
4	Operation	While operating the amplifier in a system, check for any unusual operation or condition.	

12.3. Weekly Preventive Maintenance Checks and Services Chart

Sequence No.	Item	Procedure	References
1	Exposed surfaces	Inspect all exposed surfaces for chips, cracks, rust, corrosion, or mildew.	
2	Accessible items	Check to see that all items are securely mounted.	

12.4. Cleaning

Inspect the exterior of the AM–1003/U. The exterior surfaces should be clean, and free of dust, dirt, grease, and fungus.

a. Remove dust and loose dirt with a clean soft cloth.

Warning: **Cleaning Compound (Federal stock No. 7930–395–9542) is flammable and its fumes are toxic. Provide adequate ventilation. *Do not* use near a flame.**

b. Remove grease, fungus, and ground-in dirt from the cases; use a cloth dampened (not wet) with cleaning compound.

c. Remove dust or dirt from plugs and jacks with a brush.

d. Clean exterior surfaces and control knobs; use a soft clean cloth. If dirt is difficult to remove, dampen the cloth with water; mild soap may be used for more effective cleaning.

Page 8. Delete figure 4.

Page 9. Delete figure 5.

Page 10. Delete the appendix and figure 6 (as added by C 1, 4 Jan 60) and substitute:

APPENDIX I
REFERENCES

The following is a list of references available to the operator of Amplifier, Audio Frequency AM–1003/G.

DA Pam 310–4	Index of Technical Manuals, Technical Bulletins, Supply Bulletins, Lubrication Orders and Modification Work Orders
TM 38–750	Army Equipment Record System and Procedures

Add appendix II.

APPENDIX II
BASIS ISSUE ITEMS LIST
Section I. INTRODUCTION

1. General

This appendix lists items supplied for initial operation. End items of equipment are issued on the basis of allowances prescribed in equipment authorization tables and other documents that are a basis for requisitioning.

2. Columns

a. Federal Stock Number. This column lists the 11-digit Federal stock number.

b. Designation by Model. Not used.

c. Description. Nomenclature or the standard item name and brief identifying data for each item are listed in this column. When requisitioning, enter the nomenclature and description.

d. Unit of Issue. The unit of issue is each unless otherwise indicated and is the supply term by which the individual item is counted for procurement, storage, requisitioning, allowances, and issue purposes.

e. Expendability. Nonexpendable items are indicated by NX. Expendable items are not annotated.

f. Quantity Authorized: Under "Items Comprising an Operable Equipment," the column lists the quantity of items supplied for the initial operation of the equipment.

g. Illustration. Not used.

SECTION II. FUNCTIONAL PARTS LIST

FEDERAL STOCK NUMBER	DESIGNATION BY MODEL	DESCRIPTION	UNIT OF ISSUE	EXP	QTY AUTH	ILLUSTRATION	
						FIGURE NO.	ITEM NO.
5830-537-3497		AMPLIFIER, AUDIO FREQUENCY AM-1003/G: 5w power output; 100 db gain; oper power 208v, 400 cyc, 3 ph; freq response 200 to 6,000 cps; input & output channels 180 ohm imped; 16 in lg x 4 31/32 in w x 6 1/8 in d o/a; Western Electric part No. GS-55086					
		ITEMS COMPRISING AN OPERABLE EQUIPMENT					
		AMPLIFIER, AUDIO FREQUENCY AM-1003/G: (BASIC COMPONENT)		NX	1		
Ord thru AGC		TECHNICAL MANUAL TM 11-5830-220-10:			2		
		RUNNING SPARE ITEMS					
		NO PARTS AUTHORIZED FOR STOCKAGE AT FIRST ECHELON					

By Order of the Secretary of the Army:

EARLE G. WHEELER,
General, United States Army,
Chief of Staff.

Official:

J. C. LAMBERT,
Major General, United States Army,
The Adjutant General.

Distribution:

To be distributed in accordance with DA Form 12–32, Section II (Unclas) requirements for Nike-Ajax, Nike-Hercules, Improved Nike-Hercules and Target Missile—TM—Radar.

TECHNICAL MANUAL
No. 11–5830–220–10

HEADQUARTERS,
DEPARTMENT OF THE ARMY,
WASHINGTON 25, D. C., *2 September 1959*

AUDIO FREQUENCY AMPLIFIER AM–1003/G

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

This manual describes Audio Frequency Amplifier AM–1003/G and covers installation, operation, and operator's maintenance. It includes instructions for installing, cleaning, and inspecting the equipment. The Maintenance Allocation Chart *will* be published in the second echelon portion of the technical manual.

Note. Throughout the manual, Audio Frequency Amplifier AM–1003/G is referred to as *amplifier.*

2. Forms and Records

a. Unsatisfactory Equipment Reports. Fill out and forward DA Form 468 (Unsatisfactory Equipment Report) to the Commanding Officer, U. S. Signal Equipment Support Agency, Fort Monmouth, N. J. as prescribed in AR 700–38.

b. Report of Damaged or Improper Shipment. Fill out and forward DD Form 6 (Report of Damaged or Improper Shipment) as prescribed in AR 700–58 (Army), Navy Shipping Guide, Article 1850–4 (Navy), and AFR 71–4 (Air Force).

c. Preventive Maintenance Forms. Prepare DA Form 11–238 (figs. 4 and 5) (Maintenance Check List for Signal Equipment) (Sound Equipment, Radio, Direction Finding, Radar, Carrier, Radiosonde and Television), in accordance with instructions on the form.

d. Parts List Form. Forward DA Form 2028 (Recommended Changes to DA Technical Manual Parts List or Supply Manuals 7, 8, and 9) direct to the Commanding Officer, U. S. Army Signal Equipment Support Agency, Fort Monmouth, N. J. for comments on parts listings.

e. Comments on Manual. Forward all other comments on this publication direct to the Commanding Officer, U. S. Army Signal Publications Agency, Fort Monmouth, N. J.

Section II. DESCRIPTION AND DATA

3. Purpose and Use

a. Purpose. Audio Frequency Amplifier AM–1003/G (fig. 1) provides stationary facilities for the amplification of signals in the 200- to 6,000-cycle per second (cps) operating range.

b. Use. The equipment is used to amplify an input signal to a level necessary for operation of other equipments.

4. Technical Characteristics

Number of tubes	7
Frequency range	200 to 6,000 cps
Input impedance	180 ohms
Output impedance	180 ohms
Output power	5 watts maximum
Gain	100 db
Input voltage requirement	208 volts, 400 cps, 3 phase ac

5. Components

(fig. 1)

The equipment consists of one component, Audio Frequency Amplifier AM–1003/G. No cables or spare parts are furnished with the equipment. The amplifier is 16 inches long by 5 inches wide by 5½ inches high, and weighs 5 pounds.

6. Description

The amplifier (fig. 1) inclueds a chassis with two carrying handles. Four rack mounting studs are provided for mounting the equipment in a metal rack. Input and output connectors are provided for connection to other equipments. A cover (fig. 2) attached by two retaining studs, protects the bottom of the chassis.

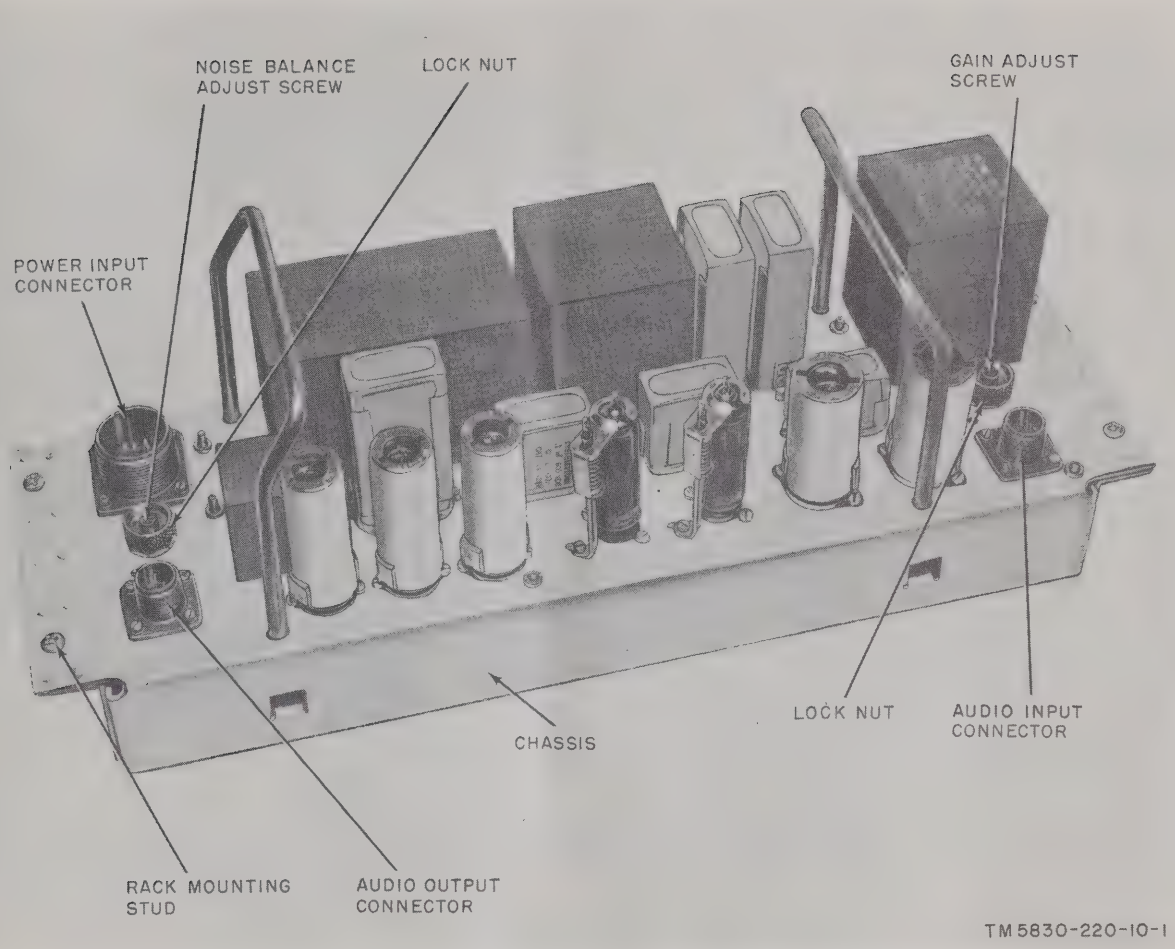

Figure 1. Audio Frequency Amplifier AM–1003/G, ***top view.***

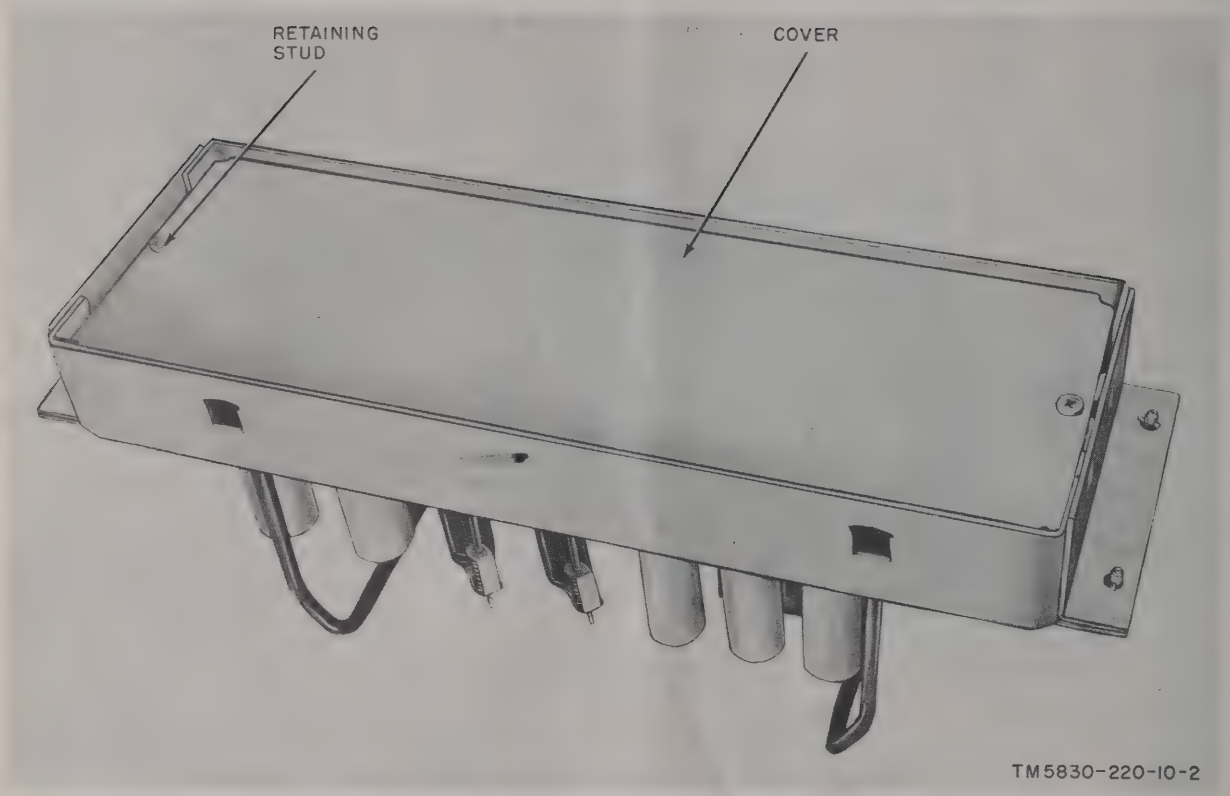

Figure 2. Audio Frequency Amplifier AM–1003/G, bottom view.

CHAPTER 2

INSTALLATION AND OPERATION

Section I. SERVICE UPON RECEIPT OF EQUIPMENT

7. Unpacking

a. Packaging Data. A typical shipping carton and its contents is shown in figure 3. The packed equipment is approximately 19 inches long by 7 inches wide by 8½ inches high. Its volume is approximately .65 cubic foot and its weight is approximately 6.8 pounds.

b. Removing Contents.

(1) Cut the tape on the outer corrugated cardboard carton; open the carton.

(2) Remove the cushioning material and lift out the inner corrugated cardboard carton.

(3) Cut the tape on the inner corrugated cardboard carton; open the carton.

(4) Carefully break the seal on the moisture-vaporpoof barrier.

(5) Open the barrier and remove the support blocks and desiccant.

(6) Lift the amplifier out of the inner corrugated cardboard carton and set it down gently on a clean, smooth surface.

(7) Remove the humidity indicator and observe the humidity indication; the indication should be a blue color.

(8) If the humidity indication is not satisfactory, replace the humidity indicator and the desiccant.

(9) When the humidity indication is satisfactory, remove the desiccant and install the amplifier (par. 9).

8. Checking Unpacked Equipment

a. Inspect the equipment carefully for damage. If the equipment has been damaged, refer to paragraph 2.

b. Check to see that the equipment is complete as listed on the packing slip.

c. Checked used or reconditioned equipment carefully to see if it has been changed by a modification work order (MWO). If modified, the MWO number will appear on the top of the chassis near the nomenclature marking.

Section II. INSTALLATION AND OPERATION

9. Installation and Connections
(fig. 1)

The equipment is shipped with the tubes installed. The installation procedures for the amplifier depend on the equipment with which it is used. In general, proceed as follows:

a. Mount the amplifier on the rack in which it is to be used; secure the amplifier in place with the rack mounting studs.

Note. The cables necessary for connecting the amplifier are provided in the rack and are not shown.

b. Connect the power cable to the power input connector.

c. Connect the two-contact input signal cable to the audio input connector.

d. Connect the three-contact output signal cable to the audio output connector.

10. Controls and Operation
(fig. 1).

a. Controls.

(1) *Gain adjust screw.* The gain adjust screw controls the output signal of the amplifier.

(2) *Noise balance adjust screw.* The noise balance adjust screw controls the fidelity of the amplifier output signal. (This adjustment is made by higher echelon maintenance personnel.)

b. Operation.

(1) Power is applied to the amplifier by the application of power to the system in which the amplifier is used.

(2) After power is applied, loosen the lock nut that secures the gain adjust screw.

(3) Adjust the gain adjust screw as required by the system in which the amplifier is used.

Note. If the gain adjust screw does not adjust the gain properly, higher echelon maintenance is required.

(4) Tighten the locknut to secure the gain adjust screw.

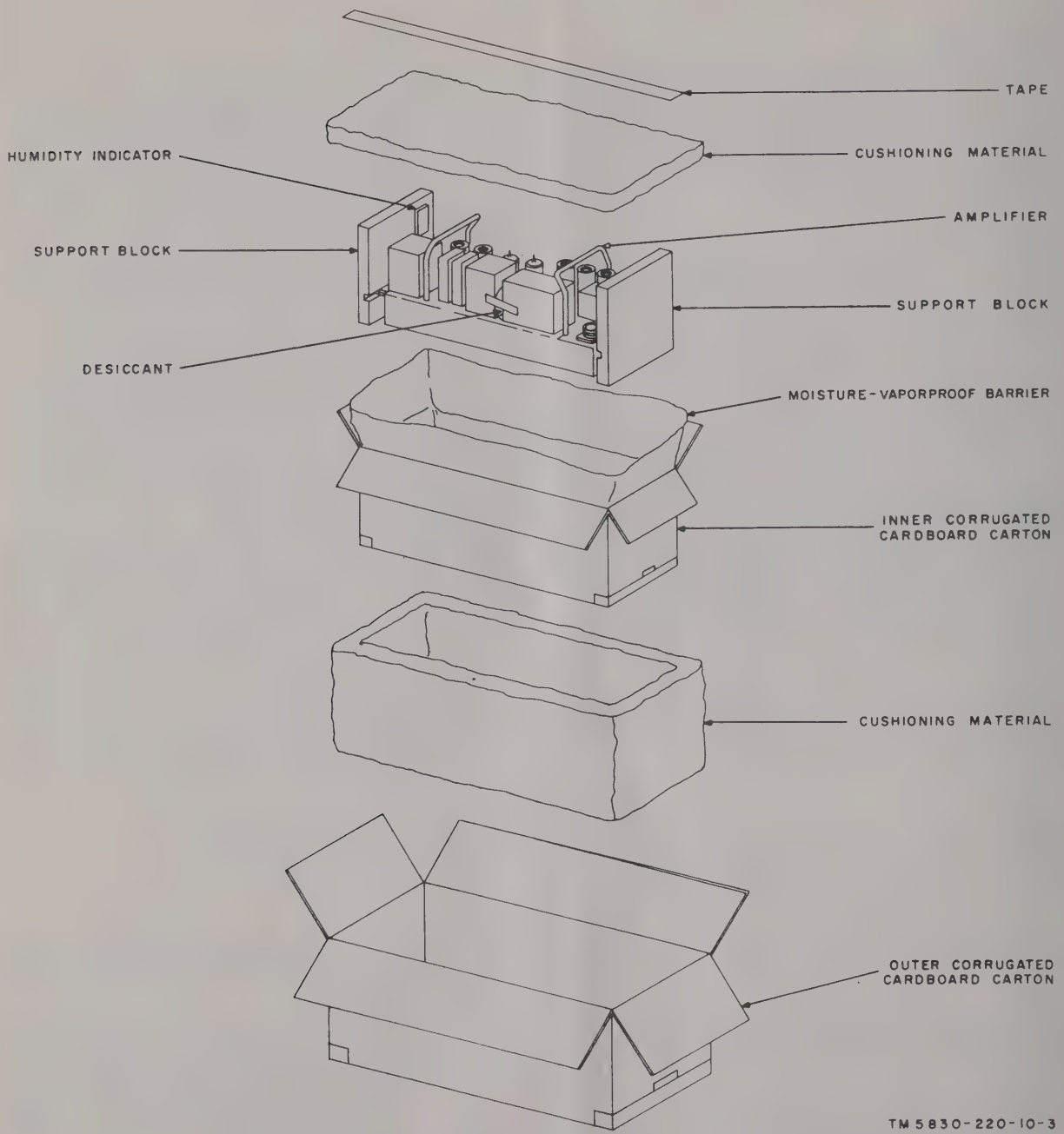

Figure 3. Packaging diagram.

CHAPTER 3

MAINTENANCE INSTRUCTIONS

11. Scope of Operator's Maintenance

a. General. All maintenance duties normally performed by the operator are included in the preventive maintenance check list (par. 12). These procedures are limited to cleaning and inspecting the equipment and do not require special tools or test equipment. The materials required for operator's maintenance of the amplifier are given in *b* below.

b. Materials Required.

(1) Lint-free cloth.

(2) Cleaning Compound (Federal stock No. 7930–395–9542).

(3) Sandpaper, No. 000.

12. Preventive Maintenance

a. DA Form 11–238. DA Form 11–238 (figs. 4 and 5) is a preventive maintenance check list to be used by the operator. The operator is authorized to perform only the procedures specified in items 1, 2, 5, 6, and 10. The reference in the ITEM block in the figure is to the paragraph that contains additional maintenance information pertinent to the particular item. Instructions for the use of the form appear on the back of the form.

b. Items. The information shown below supplements DA Form 11–238. The item numbers correspond to the ITEM numbers on the form.

Item	Maintenance procedures
2	Use a clean, dry, lint-free cloth to remove dust, dirt, moisture, and grease from components on the top of the chassis and from the chassis itself. If necessary, wet the cloth with cleaning compound and then wipe the parts dry with a clean, dry, lint-free cloth. ***Warning:* Cleaning compound is flammable and its fumes are toxic. Do not use near flame; provide adequate ventilation.**
6	Remove all rust with No. 000 sandpaper, and then wipe the sandpapered areas with a clean, dry, lint-free cloth.
10	If any of the components on the top of the chassis are loose, turn the equipment in for repair.

ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS	CONDITION
26. ~~INSPECT ANTENNA FOR EXCENTRICITIES, CORROSION, LOOSE FIT, DAMAGED INSULATORS AND REFLECTORS.~~	
27. ~~CHECK FOR NORMAL OPERATION.~~	
28. ~~BEFORE SHIPPING OR STORING, REMOVE BATTERIES.~~	

IF DEFICIENCIES NOTED ARE NOT CORRECTED DURING THE INSPECTION, INDICATE ACTION TAKEN FOR CORRECTION.

ITEM NO. 10 — LOOSE TRANSFORMER. REFERRED TO 2D ECHELON FOR REPAIR.

FOLD

MAINTENANCE CHECK LIST FOR SIGNAL EQUIPMENT
SOUND EQUIPMENT, RADIO, DIRECTION FINDING
RADAR, CARRIER, RADIOSONDE AND TELEVISION
(AR 750-625)

EQUIPMENT NOMENCLATURE: AUDIO FREQUENCY AMPLIFIER AM-1003/6

EQUIPMENT SERIAL NUMBER: 0765

INSTRUCTIONS

This form may be used for a period of one month by using the correct dates and weeks of the month. It is to be used as a Preventive Maintenance check list for Signal equipment in actual use, or for a check on equipment prior to issue.

1. For detailed Preventive Maintenance instructions see:
   a. The Technical Manual *(in TM 11 series)* for the equipment. *(See DA Pamphlet Number 310-4)*
   b. The Supply Bulletin *(SB 11-100 series)* for the equipment. *(See DA Pamphlet Number 310-4)*
   c. The Department of the Army Lubrication Order. *(See DA Pamphlet Number 310-4)*

2. The following action will be taken by either the Communications Officer/Chief for 1st echelon, or the Inspector for higher echelon:
   a. Enter Equipment Nomenclature and Serial Number.
   b. Strike out items that do not apply to the equipment.

3. Operator/Inspector will enter in the columns entitled CONDITION, on the proper line, a notation regarding the condition, using symbols specified under LEGEND.

4. After operator completes each daily inspection he will initial over the appropriate dates under "Daily Condition for Month", then return form to his supervisor.

TYPE OF INSPECTION

OPERATOR	2/3 ECHELON	DATE	SIGNATURE
✓		7 May 1959	Arthur Rankin

4

DA FORM 1 MAY 57 11-238

REPLACES DA FORMS 11-238, 1 NOV 55; 11-239, 11-244, 11-245, 11-248, 11-249, 11-250, AND 11-251; WHICH ARE OBSOLETE.

TM5830-220-10-4

Figure 4. DA Form 11-238, pages 1 and 4.

LEGEND for marking conditions:
Satisfactory, ✓.
Adjustment, Repair or Replacement required, X.
Defect corrected, (X).

DAILY CONDITION FOR MONTH OF May

DAILY
NO. 0765 ITEM AF AMPLIFIER AM-109 16

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	2D 3D ECHELON
	ar	ar	ar	ar	ar	ar	ar										
	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
1. COMPLETENESS AND GENERAL CONDITION OF EQUIPMENT. (~~Transmitter, receiver, carrying cases, misc, cables, microphones, tubes, spare parts, technical manuals~~).	✓	✓	✓	✓	✓	✓	X										
2. CLEAN DIRT AND MOISTURE FROM ~~ANTENNA, MICRO-PHONES, HEADSETS, KEYS, JACKS~~, PLUGS, COMPONENT PANELS. PAR. 12b	✓	✓	✓	✓	✓	✓	✓										
3. ~~INSPECT CONTROLS FOR NORMAL OPERATION. TAP CONTROLS LIGHTLY FOR EVIDENCE OF CUT-OUT FROM LOOSE CONTACTS.~~																	
4. ~~CHECK FOR NORMAL OPERATION OF EQUIPMENT. BE ALERT FOR UNUSUAL OPERATION OR CONDITION.~~																	

WEEKLY	CONDITION EACH WEEK 1ST	2D	3D	4TH	5TH	2D 3D ECH
5. CLEAN ~~AND TIGHTEN~~ EXTERIORS OF CASES, RACKS, ~~MOUNTS, TRANSMISSION LINES~~.	✓					
6. INSPECT CASES, ~~MOUNTS, ANTENNA TOWERS~~ AND EXPOSED METAL SURFACES FOR RUST, CORROSION. PAR. 12b	✓					
7. ~~INSPECT CORDS, CABLES, WIRES, CHECK MOUNTS FOR OUT-OF-TRUNK, BREAKS, FRAYING, UNDUE STRAIN~~.						
8. ~~CHECK ANTENNA GUY WIRES FOR PROPER TENSION OR DAMAGE~~.						
9. ~~INSPECT CANVAS AND LEATHER ITEMS FOR MILDEW, TEARS, FRAYING~~.						
10. INSPECT ACCESSIBLE ITEMS FOR LOOSENESS: ~~SWITCHES, KNOBS, JACKS~~, CONNECTORS, ~~RELAYS~~, TRANSFORMERS, ~~MOTORS, PILOT LIGHTS, BLOWERS~~, ETC.	X					
11. ~~CLEAN AND/OR INSPECT AIR FILTERS, BRASS NAME PLATES, DIAL AND METER WINDOWS~~.						
12. ~~INSPECT STORAGE BATTERIES FOR DIRT, LOOSE TERMINALS, SPECIFIC GRAVITY, DAMAGED CASES. INSPECT DRY BATTERIES FOR LEAKAGE.~~						

ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS	CONDITION
13. ~~INSPECT SHELTERS AND COVERS FOR ADEQUACY OF WEATHER PROOFING, TEARS, FRAYING~~.	
14. ~~CHECK TERMINAL BOX COVERS FOR CRACKS, DIRT, LEAKS, DAMAGED GASKETS, CRACKS~~.	

ADDITIONAL ITEMS FOR 2D AND 3D ECHELON INSPECTIONS	CONDITION
15. ~~INSPECT SEATING OF READILY ACCESSIBLE PLUG-IN ITEMS: TUBES, LAMPS, FUSES, CRYSTALS, CONNECTORS, VIBRATORS, PLUG-IN COILS~~.	
16. ~~INSPECT RELAYS AND CIRCUIT BREAKERS FOR LOOSE MOUNTINGS, BAD CONTACTS, MIS-ALINEMENT OF CONTACTS AND SPRINGS, PROPER SPRING TENSION~~.	
17. ~~INSPECT VARIABLE CAPACITORS FOR DIRT, MIS-ALINEMENT OF PLATES, LOOSE MOUNTINGS, MOISTURE~~.	
18. ~~INSPECT RESISTORS, BUSHINGS AND INSULATORS FOR CRACKS, CHIPPING, BLISTERING, MOISTURE, DISCOLORATION~~.	
19. ~~CLEAN AND TIGHTEN SWITCHES, TERMINAL BLOCKS, BLOWERS, RELAY CASES AND INTERIORS OF CHASSIS AND CABINETS NOT READILY ACCESSIBLE~~.	
20. ~~INSPECT TERMINAL BLOCKS FOR LOOSE CONNECTIONS, CRACKS AND BREAKS~~.	
21. ~~INSPECT TERMINALS OF LARGE PAPER CAPACITORS AND RESISTORS FOR DIRT, CORROSION, LOOSE CONTACTS~~.	
22. ~~INSPECT TRANSFORMERS, CHOKES, POTENTIOMETERS AND RHEOSTATS FOR OVERHEATING AND OIL LEAKAGE~~.	
23. ~~INSPECT GENERATORS, AMPLIDYNES, DYNA-MOTORS FOR BRUSH WEAR, SPRING TENSION, ARCING AND PITTING OF COMMUTATOR~~.	
24. ~~INSPECT CATHODE RAY TUBES FOR BURNT SCREEN SPOTS~~.	
25. ~~INSPECT WATERPROOF GASKETS FOR LEAKS, WORN OR LOOSE PARTS~~.	

CONTINUED ON PAGE 4

2 3

GPO 1957 O—427034

TM5830-220-10-5

Figure 5. DA Form 11–238, pages 2 and 3.

CHAPTER 4

SHIPMENT AND LIMITED STORAGE AND DEMOLITION TO PREVENT ENEMY USE

Section I. SHIPMENT AND LIMITED STORAGE

13. Disassembly of Equipment

a. Disconnect the cables from the audio input connector (fig. 1), the audio output connector, and the power input connector.

b. Loosen the four rack mounting studs and remove the amplifier from the rack in which it is mounted.

14. Repacking for Shipment or Limited Storage

Repacking of the amplifier is performed by the second echelon repairman.

Section II. DEMOLITION TO PREVENT ENEMY USE

15. Authority for Demolition

Demolition of the equipment will be accomplished only upon the order of the commander. The destruction procedures outlined in paragraph 16 will be used to prevent further use of the equipment.

16. Methods of Destruction

Use any or all of the following methods to destroy the equipment:

a. Smash. Smash the tubes, transformers, capacitors, and connectors; use sledges, axes, handaxes, pickaxes, hammers, or crowbars.

b. Cut. Cut all wiring; use axes, handaxes, or machetes.

c. Burn. Burn wiring and technical manuals, use gasoline, kerosene, oil, flame throwers, or incendiary grenades.

d. Bend. Bend chassis and rear cover.

e. Explode. If explosives are necessary, use firearms, grenades, or TNT.

f. Dispose. Bury or scatter the destroyed parts in slit trenches or foxholes, or throw them into streams.

[AG 413.44 (19 Aug 59)]

By Order of *Wilber M. Brucker*, Secretary of the Army:

L. L. LEMNITZER,
General, United States Army,
Chief of Staff.

Official:

R. V. LEE,
Major General, United States Army,
The Adjutant General.

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  First US Army (7)
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Div (2)
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Army Pictorial Cen (2)
Engr Maint Cen (1)
USA Ord Msl Comd (3)
USASSA (15)
USASSAMRO (1)
USA Sig Pub Agcy (8)
USA Sig Engr Agcy (1)
USA Comm Agcy (2)
Svc Colleges (5)
USA Sig Eqp Spt Agcy (2)
USA Sig Msl Spt Agcy (13)
WRAMC (1)
AFIP (1)
AMS (1)
Ports of Emb (OS) (2)
Trans Terminal Comd (1)
Army Terminals (1)
OS Sup Agcy (1)
Yuma Test Sta (2)
USA Elct PG (1)
Sig Lab (5)
Sig Fld Maint Shops (3)
Mil Dist (1)
USA Corps (Res) (1)
Sector Comd, USA Corps (Res) (1)
JBUSMC (2)
Units org under fol TOE:
  11-7 (2)
  11-16 (2)
  11-57 (2)
  11-97 (2)
  11-117 (2)
  11-155 (2)
  11-500 (AA-AE) (2)
  11-557 (2)
  11-587 (2)
  11-592 (2)
  11-597 (2)
  44-145 (2)
  44-147 (2)
  44-445 (2)
  44-447 (2)
  44-448 (2)
  44-535 (2)
  44-537 (2)
  44-545 (2)
  44-547 (2)
  44-549 (2)

NG: State AG (3); units—same as Active Army except allowance is one copy to each unit.
USAR: None.
For explanation of abbreviations used, see AR 320-50.

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